

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1.-22. Cancelled

23. (Currently Amended) An isolated nucleic acid molecule comprising the nucleotide sequence ~~selected from the group consisting of:~~

a) SEQ ID NO: 4, SEQ ID NO: 6 or a nucleotide sequence complementary to the nucleotide sequence of SEQ ID NO: 4 or SEQ ID NO: 6;

b) ~~SEQ ID NO: 7, SEQ ID NO: 9 or a nucleotide sequence complementary to the nucleotide sequence of SEQ ID NO: 7 or SEQ ID NO: 9; and~~

e) ~~SEQ ID NO: 10, SEQ ID NO: 12 or a nucleotide sequence complementary to the nucleotide sequence of SEQ ID NO: 10 or SEQ ID NO: 12.~~

24. (Currently Amended) An isolated nucleic acid molecule comprising a nucleotide sequence encoding a biologically active portion of an LGR6 polypeptide comprising the at least 500 consecutive amino acid residues of SEQ ID NO:5, sequence wherein the at least 500 residues of SEQ ID NO:5 comprise the LRR domain of SEQ ID NO:5, wherein the LRR domain is amino acid residues 64 to 87 and 88 to 111 of SEQ ID NO: 5, SEQ ID NO:8, or SEQ ID NO: 11, or a nucleotide sequence complementary to a nucleotide sequence encoding a polypeptide comprising the amino acid sequence of SEQ ID NO: 5, SEQ ID NO: 8, or SEQ ID NO:11.

25. (Currently Amended) An isolated nucleic acid molecule comprising a nucleotide sequence encoding a fusion polypeptide comprising the ~~amino acid sequence of SEQ ID NO: 5, SEQ ID NO: 8, or SEQ ID NO: 11~~ polypeptide of claim 24, and a heterologous polypeptide.

26. (Previously Presented) An isolated recombinant expression vector comprising the nucleic acid molecule of claim 23.

27. (Previously Presented) An isolated recombinant expression vector comprising the nucleic acid molecule of claim 24.

28. (Previously Presented) An isolated recombinant expression vector comprising the nucleic acid molecule of claim 25.

29. (Previously Presented) A host cell comprising the nucleic acid molecule of claim 23.
30. (Previously Presented) A host cell comprising a nucleic acid molecule of claim 24.
31. (Previously Presented) A host cell comprising a nucleic acid molecule of claim 25.
32. (Previously Presented) The host cell of claim 29 which is a mammalian cell.
33. (Previously Presented) The host cell of claim 30 which is a mammalian cell.
34. (Previously Presented) The host cell of claim 31 which is a mammalian cell.
35. (Currently Amended) A method for producing a polypeptide comprising the amino acid sequence of SEQ ID NO:5, ~~SEQ ID NO:8, or SEQ ID NO:11~~, comprising culturing the host cell of claim 29 under conditions in which the nucleic acid molecule is expressed.
36. (Currently Amended) A method for producing a biologically active portion of an LGR6 polypeptide comprising the at least 500 consecutive amino acid sequence residues of SEQ ID NO:5, SEQ ID NO: 8 or SEQ ID NO: 11, wherein the at least 500 residues of SEQ ID NO:5 comprise the LRR domain of SEQ ID NO:5, wherein the LRR domain is amino acid residues 64 to 87 and 88 to 111, comprising culturing the host cell of claim 30 under conditions in which the nucleic acid molecule is expressed.
37. (Currently Amended) A method for producing a fusion polypeptide comprising the at least 500 consecutive amino acid sequence residues of SEQ ID NO: 5, SEQ ID NO: 8, or SEQ ID NO: 11, wherein the at least 500 residues of SEQ ID NO:5 comprise the LRR domain of SEQ ID NO:5, wherein the LRR domain is amino acid residues 64 to 87 and 88 to 111, and a heterologous polypeptide, comprising culturing the host cell of claim 31 under conditions in which the nucleic acid molecule is expressed.
38. (Currently Amended) A kit comprising ~~a compound which selectively hybridizes to a~~ the nucleic acid molecule of claim 23 and instructions for use.
39. (Currently Amended) A kit comprising ~~a compound which selectively hybridizes to a~~ the nucleic acid molecule of claim 24, or a complement thereof and instructions for use.

40. (Canceled)
41. (New) The isolated nucleic acid molecule of claim 24 comprising a nucleotide sequence encoding a polypeptide with an amino acid sequence of SEQ ID NO:5.
42. (New) The isolated nucleic acid molecule of claim 24 comprising a nucleotide sequence encoding a polypeptide with an amino acid sequence of SEQ ID NO:8.
43. (New) The isolated nucleic acid molecule of claim 24 comprising a nucleotide sequence encoding a polypeptide with an amino acid sequence of SEQ ID NO:11.
44. (New) A host cell comprising the nucleic acid molecule of claim 41.
45. (New) A host cell comprising the nucleic acid molecule of claim 43.